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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,196	02/19/2002	Sudeep Gupta	135845 (ALCA02-35845)	7040

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EXAMINER

DUONG, OANH L

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/078,196	Applicant(s) GUPTA, SUDEEP	
	Examiner Oanh Duong	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 7-10 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gentry et al. (Gentry) (US 6,799,210 B1), in view of Berg et al. (Berg) (US 6,674,713 B1).

Regarding claim 1, Gentry teaches in a packet-based communication system having a first set of media gateways and at least a second set of media gateways, and the packet-based communication system having a first control device at least selectably coupled to the media gateways of the first set and the second set and at least a second control device also at least selectably coupled to the media gateways of the first set and the second set, the first control device and the second control device selectably operable to provide session control of communications effectuated by way of individual ones of the media gateways, an improvement of apparatus for facilitating selection at least of which of the first and second control devices are operable during a selected period, to provide the session control of communication to selected ones of the media

gateways of the first and at least second sets (Figs. 1 and 4), said apparatus comprising:

Determiner (i.e., Virtualizer, Fig. 4) coupled to receive indications of communication indicia selected to at least communications to be effectuated by way of individual ones of the media gateways (i.e., col. 8 lines 21-23), said determiner for determining, responsive thereto, which of the first and at least second control devices are to provide the session control of the communications to the selected ones of the media gateways (i.e., col. 7 lines 57-64, Gentry discloses (col. 7 lines 26-34, Gentry discloses the virtualizer/determiner determines which media gateway controllers it should register/select); and said determiner for allocating session control operations for performing session control of the selected ones of the media gateways to the first and second softswitches responsive to a status (col. 8 line 32-col. 9 line 15).

Gentry does not explicitly teach the first control device comprises a first softswitch and the second control device comprises a second softswitch and each softswitch provides a status signal indicating a current operational status of one of operable, partially operable, and wholly inoperable.

Berg teaches method and system wherein the first and second gateway controllers are designated as Active and Standby (see abstract). Berg teaches the first control device comprises a first softswitch (i.e., Media Gateway controller 102 a, Fig. 1B) and the second control device comprises a second softswitch (i.e., Media Gateway Controller 102b, Fig. 1B) and each softswitch provides a status signal indicating a current operational status of one of operable, partially operable, and wholly inoperable

(i.e., notifying the Gateway of the state of the Media Gateway Controller, Fig. 1B col. 8 lines 35-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Gentry to include he first control device comprises a first softswitch and the second control device comprises a second softswitch and each softswitch provides a status signal indicating a current operational status of one of operable, partially operable, and wholly inoperable as taught by Berg. One would be motivated to do so to support fault tolerant hardware configurations for the media gateway controller (Berg, col. 2 lines 41-43).

Regarding claim 2, Gentry teaches the apparatus of claim 1 further comprising a control signal generator coupled to said determiner to receive indications of determinations made by said determiner and coupled to the first and second control device, said control signal generator operable responsive to the indications of the determinations made by said determiner, for generating control signals instructing the first and second control devices whether to provide the session control for individual ones of the media gateways (i.e., virtualizer routes the message to the appropriate media gateway controller, col. 7 lines 31-32).

Regarding claim 3, Gentry teaches the apparatus of claim 1 wherein said determiner is further coupled to receive indicia representative of anticipated session control requirements of the individual ones of the media gateways and wherein

determinations made by said determiner are further responsive to the indicia representative of the anticipated session control requirements (col. 7 lines 27-30, Gentry discloses virtualizer selected media gateway controller based depend on the type of service as events are reported from media gateway(s)) .

Regarding claim 4, Gentry teaches the apparatus of claim 1 wherein said determiner is further coupled to receive indicia representative of an operability status of the first control device and indicia representative of an operability status of the second control device and wherein determinations made by said determiner are further responsive to indicia representative of the operability status of the first and second control devices, respectively (col. 8 lines 43-46, Gentry discloses if media gateway controller has excess capacity, a new media gateway may be provided with a virtualizer).

Regarding claim 5, Gentry teaches the apparatus of claim 1 wherein determinations made by said determiner are made pursuant to load balancing calculations for balancing, at a selected ratio, session control functions to be provided by the first and second control devices, respectively (col. 8 lines 42-46, Gentry disclose balancing the load between media gateway controller if one has access capacity).

Regarding claim 7, Gentry teaches the apparatus of claim 1 wherein the first control device comprises a first softswitch and the second control device comprises a

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second softswitch, said determiner for allocating session control operations for performing session control of the selected ones of the media gateways to the first and second control devices pursuant to a session control allocation scheme and responsive to the indications of the communication indicia (col. 33-35).

Regarding claim 8, Gentry teaches the apparatus of claim 7 wherein at least part of said determiner is embodied at least at one of the first softswitch and the second softswitch (col. 7 lines 39-42, Gentry discloses virtualizer can be implemented in the media gateway controller).

Regarding claim 9, Gentry teaches the apparatus of claim 7 wherein the communication system further comprises a signaling hub forming a message router and wherein at least a part of said determiner is embodied at the signaling hub (col. 2 lines 46-47 and col. 7 lines 39-42).

Regarding claim 10, Gentry teaches the apparatus of claim 9 wherein the communication system comprises an SS7 network as a portion thereof, wherein the signaling hub comprises a Signal Transfer Point (STP), and wherein the at least the part of said determiner is embodied at the Signal Transfer Point (col. 5 lines 39-41 and col. 7 lines 39-42).

Regarding claim 13, Gentry teaches the apparatus of claim 1 wherein the at least the second set of media gateways comprises the second set of media gateways and at least a third set of media gateways, wherein the at least the second control device comprises the second control device and at least a third control device, and wherein said determiner determines which of the first, second and at least third control devices, respectively, and in what allocation manner, are to provide the session control of the communications (col. 7 lines 2-14)

Regarding claim 14, Gentry teaches the apparatus of claim 13 wherein the first set, the second set, and the third set form independent sets (col. 7 lines 2-10).

Claim 15 represents a method that is parallel to claim 1. Claim 15 does not recite or define any new limitation above claim 1 and therefore is rejected for similar reasons.

Regarding claim 16, Gentry teaches the method of claim 15 further comprising the operation of generating control signals instruction that first and at least the second control devices whether to provide the session control for individual ones of the media gateways (col. 7 lines 26-34).

Claim 17 does not teach or define any new limitation above claim 5 and therefore is rejected for similar reasons.

Claim 18 does not teach or define any new limitation above claim 3 and therefore is rejected for similar reasons.

Claim 19 does not teach or define any new limitation above claim 4 and therefore is rejected for similar reasons.

Regarding claim 20, Gentry teaches the method of claim 15, wherein the indications of the communication indicia detected during said operation of detecting comprise indicia representative of existing session control requirements of the individual ones of the media gateways (col. 7 lines 20-23).

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gentry, in view of Berg, and further in view Lindhorst-Ko (US 6,725,401 b1).

Regarding claim 6, Gentry teaches the apparatus of claim 5.

The combination of teachings of Gentry and Berg does not explicitly teach the selected ratio of load balancing between the first and second control devices comprises a substantially one-to-one ratio.

Lindhorst-Ko teaches communications network wherein the data traffic is load balanced across the ones of the set of communications paths having an operational status (see abstract). Lindhorst-Ko teaches the selected ratio of load balancing is a substantially one-to-one (col. 2 lines 28-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the 1:1 ratio of Lindhorst-Ko in the process of load balancing in the combination of teachings of Gentry and Berg. One would be motivated to do so to allow the load to be evenly distributed between resources.

4. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gentry, in view of Berg, and further in view of Admitted Prior Art (APA).

Regarding claim 11, Gentry teaches the apparatus of claim 1

The combination of teachings of Gentry and Berg does not explicitly teach the communication system comprises a proxy device positioned separate from, and coupled to, the first and at least second control devices and wherein at least a part of said determiner is embodied at the proxy device.

Gentry teach the virtualizer can be implemented in a separate network entity (col. 7 lines 39-42). APA teaches network entity is a proxy device (page 4 line8-11).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the virtualizer of Gentry in the proxy device of APA. One would be motivated to do so to allow messages to be routed to the appropriate media gateway controller (APA, page 4 line 9).

Claim 12 does not recite or define any new limitation above claim 1 and therefore is rejected for similar reasons.

Response to Arguments

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 9:30AM - 6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.D
March 26, 2006



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER